

Title (en)
Methods for detecting a target nucleic acid in a sample.

Title (de)
Verfahren zum Nachweis von DNS in einer Probe.

Title (fr)
Procédé pour la détection d'ADN dans un échantillon.

Publication
EP 0512334 A2 19921111 (EN)

Application
EP 92106989 A 19920424

Priority
US 69520191 A 19910502

Abstract (en)
This invention relates to improved methods for nucleic acid detection using amplification methods such as the polymerase chain reaction (PCR). More specifically, the invention provides methods for simultaneous amplification and detection to enhance the speed and accuracy of prior methods. The methods involve the introduction of detectable DNA binding agents into the amplification reaction, which agents produce a detectable signal that is enhanced upon binding double-stranded DNA. In a preferred embodiment, the binding agent is a fluorescent dye. The methods also provide means for monitoring the increase in product DNA during an amplification reaction.

IPC 1-7
C12Q 1/68; C12Q 1/70

IPC 8 full level
C12N 15/09 (2006.01); **C12M 1/00** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/70** (2006.01); **G01N 21/64** (2006.01); **G01N 33/50** (2006.01); **G01N 33/58** (2006.01)

CPC (source: EP US)
C12Q 1/6816 (2013.01 - EP US); **C12Q 1/6818** (2013.01 - EP US); **C12Q 1/6851** (2013.01 - EP US); **C12Q 1/686** (2013.01 - EP US); **C12Q 1/6876** (2013.01 - EP US); **C12Q 1/6879** (2013.01 - EP US); **C12Q 1/703** (2013.01 - EP US); **G01N 21/6428** (2013.01 - EP US); **B01L 7/52** (2013.01 - EP US); **Y10S 435/81** (2013.01 - EP US); **Y10T 436/143333** (2015.01 - EP US)

C-Set (source: EP US)
1. **C12Q 1/6816 + C12Q 2545/10 + C12Q 2563/173 + C12Q 2561/113**
2. **C12Q 1/6818 + C12Q 2545/10 + C12Q 2563/173 + C12Q 2561/113**
3. **C12Q 1/6851 + C12Q 2561/113 + C12Q 2563/173**
4. **C12Q 1/686 + C12Q 2561/113 + C12Q 2563/173**

Cited by
US7700275B2; US6833257B2; US5795748A; US7312054B2; US6066458A; US6060242A; EP0599337A3; US5939256A; EP0640828A1; CN1090679C; US5593867A; EP2611917A4; EP0684239A1; US6156506A; EP0678581A1; US5928907A; US6015674A; EP0714986A1; US5624798A; US6022961A; US5948673A; US6124342A; EP1558756A4; US5863736A; US6214293B1; EP0699768A1; EP0713921A3; AU700885B2; EP0643140A1; US5670315A; US6448047B2; US7718361B2; WO2013030168A1; CN1304596C; GB2346972A; GB2346972B; EP0684316A1; US5563037A; CN1100884C; EP1489190A3; WO2006049793A3; WO9744486A1; WO0214548A1; US6171785B1; US6814934B1; WO2011047329A2; WO2011153254A2; US8343443B2; KR100641595B1; WO9901578A1; WO0192569A3; WO9928500A1; WO02097132A3; EP2147981A1; US6645733B1; US8441629B2; EP2955234A1; US6849458B2; WO2014150300A2; US9365902B2; US10294529B2; WO2019157358A1; EP1798542A1; US6297008B1; EP0776981A2; WO03004596A1; WO9836096A1; WO9506750A1; US6569631B1; WO2013076029A1; US9663821B2; US10106846B2; US10745748B2; EP0702090A2; EP0707077A2; WO2013030167A1; WO2013066641A1; US8512637B2; US9822412B2; US10633707B2; DE102007041864A1; US6348596B1; US6251591B1; EP0787806A2; WO2013043715A1; WO2015150900A2; EP3572093A1; EP1798650A1; WO2004046331A2; US7122321B2; WO2013181125A2; US9079182B2; EP3604552A1; WO2021180858A1; US6242477B1; WO2012040403A1; EP2937423A1; WO2017201070A1; US10844441B2; EP4039826A1; US11530455B2; US8658099B2; EP3168309A1; WO2017081047A1; US11753684B2; EP1962085A2; WO2011128096A1; EP2913398A1; WO2016077366A1; US9822413B2; US10017818B2; EP3521454A1; US10801067B2; EP3739064A1; WO2020229461A1; US11773443B2; US7615346B2; EP2127751A1; WO2004053155A1; US7262006B1; US6255050B1; EP0726312A2; EP2700723A2; US8637655B2; US8641971B2; EP2789693A1; US8986612B2; US9097626B2; EP2952588A1; EP2036990A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)
US 6171785 B1 20010109; AT E184322 T1 19990915; AT E223970 T1 20020915; AU 1513892 A 19921105; AU 665185 B2 19951221; BR 9201618 A 19921215; CA 2067909 A1 19921103; CA 2067909 C 20050913; CA 2218818 A1 19921103; CA 2218818 C 20070807; DE 1256631 T1 20031127; DE 69229929 D1 19991014; DE 69229929 T2 20000518; DE 69232773 D1 20021017; DE 69232773 T2 20030807; DE 69232773 T3 20100610; DK 0512334 T3 20000403; DK 0872562 T3 20021230; DK 0872562 T4 20100510; EP 0512334 A2 19921111; EP 0512334 A3 19930303; EP 0512334 B1 19990908; EP 0872562 A1 19981021; EP 0872562 B1 20020911; EP 0872562 B2 20091216; EP 1256631 A1 20021113; ES 2137164 T3 19991216; ES 2183256 T3 20030316; ES 2183256 T5 20100430; IL 101696 A0 19921230; JP 3007477 B2 20000207; JP 3136129 B2 20010219; JP H05184397 A 19930727; JP H10201464 A 19980804; NO 311043 B1 20011001; NO 921731 D0 19920430; NO 921731 L 19921103; NZ 242565 A 19940726; US 5994056 A 19991130; US 6814934 B1 20041109; ZA 922990 B 19930127

DOCDB simple family (application)
US 47053295 A 19950606; AT 92106989 T 19920424; AT 98110423 T 19920424; AU 1513892 A 19920424; BR 9201618 A 19920430; CA 2067909 A 19920501; CA 2218818 A 19920501; DE 02015199 T 19920424; DE 69229929 T 19920424; DE 69232773 T 19920424; DK 92106989 T 19920424; DK 98110423 T 19920424; EP 02015199 A 19920424; EP 92106989 A 19920424; EP 98110423 A 19920424; ES 92106989 T 19920424; ES 98110423 T 19920424; IL 10169692 A 19920427; JP 15845492 A 19920506; JP 2123698 A 19980202; NO 921731 A 19920430; NZ 24256592 A 19920430; US 69520191 A 19910502; US 96820897 A 19971112; ZA 922990 A 19920424